

Exhibit 1

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BUSINESS

Insulin Prices Soar While Drugmakers' Share Stays Flat

Role of health-care middlemen fuel market with higher list prices; deep discounts are available to some

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A packet of diabetes drug Lantus SoloStar moves along the production line at Sanofi plant. List prices for the French drugmaker's and others' insulin have soared. PHOTO: RALPH ORLOWSKI/REUTERS

Insulin prices are soaring, creating pain for patients whose lives depend on the injectable drug—yet most of the revenue from the increases isn't going to the drug manufacturers. It is largely the middlemen that benefit.

The major manufacturers of insulin—[Eli Lilly](#) LLY -4.06% ▼ & Co. of Indianapolis, [Novo Nordisk](#) NOVO.B -6.93% ▼ A/S of Denmark and [Sanofi](#) SA SAN -6.64% ▼ of France—are collecting about the same or less than they did several years ago. The price increases—top-selling insulins have more than doubled in price since 2011—reflect the growing role of middlemen known as pharmacy-benefit managers who negotiate rebates and fees based on list prices.

This convoluted payment system for drugs in the U.S. encourages high list prices and steep behind-the-scenes discounts, and is becoming a regular source of

public outrage, most recently with Mylan NV's EpiPen, an emergency allergy treatment. The fragmented system offers some bill payers lower overall costs while uninsured patients and those with certain health plans pay more. Insulin, like EpiPen, is used by millions of Americans.

At the same time, higher overall costs are encouraging U.S. health insurers and employers to make patients contribute more to their health care. In part, their use of higher deductibles contributes to the cost shifting to patients. Higher drug list prices mean those patients most exposed to the price increases pay more before their plan coverage kicks in.

Drug companies have sharply boosted U.S. list prices for top-selling insulins—Sanofi's Lantus, Eli Lilly's Humalog and Novo Nordisk's NovoLog—since 2011, according to data provider Truven Health Analytics. Lantus, the top-selling insulin, now costs \$248.51 a vial, up from \$114.15 in 2011. A Sanofi spokeswoman said the company hasn't increased its list price in nearly two years.

"Prices for these products have increased," said Aaron Kesselheim, an associate professor at Harvard Medical School who has researched insulin costs. "It's also the case that there are more patients under high-deductible health plans and who may have a greater copay and coinsurance, and they're being exposed to a larger share of the prices as well."

Net prices, or what drugmakers retain after discounts, have stayed the same or fallen in the past two years as the pharmaceutical companies compete to offer ever-deeper discounts to stay on the preferred drug lists at insurers and the PBM middlemen.

The reason drugmakers sharply raise list prices without a corresponding increase in net price is that PBMs demand higher rebates in exchange for including the drug on their preferred-drug lists, said Enrique Conterno, president of Lilly's diabetes business.

Eli Lilly has raised the list price of Humalog—to \$254.80 a vial, more than double the 2011 price. After rebates and discounts, Lilly on average in the U.S. collects less for its Humalog insulin than it did in 2009, Mr. Conterno said.

PBMs get to keep a portion of the rebates off list that they negotiate—though they pass the rest on to clients—and the administrative fees that PBMs collect from manufacturers are based on percentages of the list prices.

However, counters Steve Miller, chief medical officer of Express Scripts Holding Co., the largest U.S. PBM, “We never tell pharmaceutical companies we want high sticker prices. We want a low net price.”

He acknowledges that “certain patients get caught in the middle of this, and we have got to figure out how to put guard rails around that,” such as setting a maximum pharmacy price.

The better pricing we’re providing is not reaching the patients.

— Enrique Conterno, Eli Lilly

About six million Americans use insulin, according to the American Diabetes Association.

For Sanofi’s Lantus, the average U.S. net price fell by 17% in 2015 and is on track to fall a further 10% this year, according to estimates by equity researchers at Sanford C. Bernstein & Co. The firm expects [the net price of Novo Nordisk’s Levemir insulin to fall 6%](#) this year. Sanofi and Novo Nordisk have [warned investors that falling prices in the U.S. will hurt profit growth](#).

America’s Health Insurance Plans, an industry trade group, said drug companies control pricing, and when insulin prices rise, “patients end up paying more—regardless of what kind of insurance plan they have.”

Christie Tucker, a 45-year-old electrical contractor in Port Angeles, Wash., said the bill for a six-week supply of insulin for her son Preston has soared in the past two years.

When Preston was diagnosed, Mrs. Tucker paid \$40 for a six-week supply. But the cost jumped to more than \$600 in January because, instead of a fixed-dollar-amount copay, her insurance plan charges 30% of the pharmacy price of insulin,

she said. Mrs. Tucker has saved on some prescriptions using coupons but expects to pay \$650 for the next refill.

High-deductible insurance plans are causing sticker shock for many patients. About 23% of American workers with employer-sponsored health plans have annual deductibles of at least \$2,000 a person, up from 7% in 2009, according to the Kaiser Family Foundation.

Jeff Dunlop, a 41-year-old mental-health case manager in Winter Haven, Fla., said he paid about \$1,250 for a three-month supply of Lilly's Humalog earlier this year. Mr. Dunlop, who was diagnosed with Type 1 diabetes as a child, paid the full cost because his family insurance plan—offered by his wife's employer—now has a \$4,000 annual deductible.

He can handle the cost for now but said he worries about the future.

“There's a lot of people out there that just can't afford it,” he said. “I'm one or two unfortunate circumstances away from being in that boat. That's scary because I need that stuff to live. Without it, I die.”

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